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REMARKS

Reconsideration of the present application in view of the above amendments and following arguments is earnestly solicited. The application originally included 27 claims. Pursuant to a restriction requirement, Applicant telephonically elected to prosecute the invention defined in claims 1-11. Applicant hereby affirms that election without traverse and has accordingly cancelled non-elected claims 12-27 without prejudice to consideration in a divisional application.

Applicant appreciates the indication of allowable subject matter in claims 10 and 11. Accordingly, Applicant has amended claim 10 to place it in independent form by incorporating the limitations of parent claim 1. Although claim 10 depended from claim 9, Applicant has not included the limitations of this intervening claim in amended claim 10 because claim 9 was rejected as obvious. It is therefore believed that the limitations of claim 10 were regarded in the Office Action to constitute the patentable subject matter. Applicant has added new claims 28-35 which depend from newly independent claim 10. These claims track dependent claims 2-9 originally presented in this application, so they do not constitute new matter. It is believed that amended claim 10 and its dependent claims 11 and 28-35 are in condition for allowance.

Original claims 1-9 stand rejected as anticipated or obvious in view of the primary references of Schwarz and Soyama. In particular, independent claim 1 was rejected as anticipated by each of these references. As explained below, it is believed that neither of these references discloses each limitation of Applicant's claim 1, and therefore cannot anticipate that claim.

Claim 1 recites the limitation of directing an "aerated jet spray" onto a part immersed in a chemical bath. This aerated jet spray is of a chemical solution "effective to strip the coating from the part". Neither of these limitations is present in either Schwarz or Soyama.

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Turning first to the Schwarz patent no. 6,253,462, this reference discloses a method of cleaning and drying workpieces. Schwarz does not disclose a process for removing a coating from a part and the fluids described in this reference are not "effective to strip" a coating from a part, as required by claim 1. Schwarz only generically refers to a "cleaning fluid" without specifically defining the chemical solution of the fluid. However, the entire Schwarz disclosure is directed to "Removal of manufacturing residues, for example oil, grease or chips from workpieces which have fine structural features". Col. 1, ll. 9-11. Schwarz further discusses the disadvantages of using treatments that include chemical solvents and therefore teaches away from the disclosed "cleaning fluid" as including such solvents.

More fundamentally, Schwarz does not disclose the use of an "aerated jet spray". Schwarz' discussion of cavitation has erroneously been equated to the use of an aerated jet spray. Nowhere in this reference is the spray of cleaning fluid described as being aerated. Instead, Schwarz clearly states that the disclosed system relies on the "impact of the cleaning fluid discharged from the spray unit and impinging on the workpieces" and contemplates that the "cleaning fluid ... causes turbulence and cavitation effects in the liquid bath". Col. 2, ll. 29-40 [emphasis added]. Thus, the cleaning fluid spray is not itself turbulent or cavitating, but only causes those effects.

Moreover, cavitation is not aeration. Cavitation is "[t]he sudden formation and collapse of low-pressure bubbles in liquids by means of mechanical forces, such as those resulting from rotation of a marine propeller". The American Heritage Dictionary of the English Language, 4th Ed.(2000). Thus, in Schwarz, the mechanical force is the impingement of the cleaning fluid spray 4 on the liquid in the vessel 1 that creates the cavitation zone 9. It is instructive to note that Schwarz states that a gas spray may also be used to create this cavitation. Col. 2, ll.36-39; col. 5, ll. 44-46.

On the other hand, aeration is generically the exposure of a fluid to air or other gas. More specifically, and as used in the context of the present invention,

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aeration is the entrainment of air or gas bubbles within a liquid jet. Thus, as defined in claim 1, the jet spray itself is aerated and does not somehow become aerated upon introduction into the chemical bath. There is no disclosure in Schwarz of the cleaning fluid being aerated at any point in the cleaning process, let alone prior to its injection into the vessel. Moreover, Schwarz does not even contemplate the use of an aerated jet spray, as recited in Applicant's claim 1. As pointed out above, Schwarz regards a spray of cleaning fluid and a gaseous medium as equally capable of generating the requisite cavitation effects. Moreover, it is contrary to the definition of aeration to entrain a gaseous medium within itself.

Schwarz only discloses cavitation, not aeration. Therefore, it cannot anticipate Applicant's claim 1. Moreover, as explained above, Schwarz does not contemplate the introduction of an aerated jet spray, so there is no suggestion to replace the high pressure cleaning fluid with an aerated jet spray. Consequently, Applicant's claim 1 and its dependent claims are both novel and non-obvious over Schwarz, whether taken alone or in combination with any reference of record.

The Soyama reference suffers from the same problems as Schwarz. As a preliminary matter, the Soyama patent no. 6,855,208 concerns a method of peening metal part surfaces (col. 1, ll. 6-15), and does not disclose a method for removing a coating from a part, as required by Applicant's claim 1. Soyama only discloses the use of high pressure water injected from the nozzle 4. Col. 5, l. 36. Water is not a "chemical solution effective to strip the coating" from a part. Thus, like Schwarz, Soyama fails this element of Applicant's claimed invention.

Soyama also fails to disclose or contemplate an "aerated jet spray". As explained in that reference, the Soyama inventor undertook a complete study of "the collapsing impact force of the cavitation bubble". Col. 1, ll. 52-55. Thus, Soyama relies upon "[h]igh-pressure water .. injected from nozzle 4 to generate cavitation around the jet". Col. 5, ll. 36-37 [emphasis added]. Like Schwarz, the Soyama process works by creating cavitation in the fluid contained in the vessel


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1 and surrounding the workpiece W. Cavitation is not aeration, and the high pressure jet in Soyama is not an "aerated jet spray" as required by Applicant's claim 1.

Thus, it is clear that Soyama neither discloses nor contemplates every limitation of claim 1 of the present application. It is therefore believed that claim 1 and its dependent claims 2-9 are patentable over Soyama, whether taken alone or in combination with any reference of record.

Reconsideration of the present application as amended is solicited. It is believed that this application, including claims 1-11 and new claims 28-35, is in condition for allowance, and action toward that end is requested. The Examiner is invited to contact the undersigned agent of record if it is believed that a telephonic interview will help place this case in condition for allowance.

Respectfully submitted,



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